

**CALIFORNIA WILDLIFE HABITAT RELATIONSHIPS SYSTEM**  
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B241 Xantus' Murrelet *Synthliboramphus hypoleucus*  
Family: Alcidae Order: Charadriiformes Class: Aves

Written by: S. Sanders  
Reviewed by: L. Mewaldt  
Edited by: E. Beedy, S. Granholm  
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#### DISTRIBUTION, ABUNDANCE, AND SEASONALITY

In California, the northern race (*S. h. scrippsi*) is a fairly common breeder on the Channel Islands, where it occurs from March through July (Garrett and Dunn 1981). The state's entire population of 3500 is restricted to this area; 95% breeds on Santa Barbara Island. The remaining 5% nests in small colonies on Prince Island, Sutil Island, East Anacapa Island, Snag Rock, and Gull Island (Sowls et al. 1980). After breeding, this race moves northward. In fall and winter, it is observed most often in Monterey Bay (McCaskie et al. 1979). The southern race (*S. h. hypoleucus*) is a rare visitor to southern offshore waters in late summer and fall (Garrett and Dunn 1981).

#### SPECIFIC HABITAT REQUIREMENTS

**Feeding:** Larval fish are important in the diet; northern anchovies, Pacific sauries, and rockfish are the most frequently taken prey at the Channel Islands (Hunt et al. 1979). Northern anchovy is a particularly critical prey species; availability may affect breeding success (Hunt and Butler 1980). Usually forages in pelagic waters adjacent to island colonies (Sowls et al. 1980). As all alcids, forages by diving and pursuing prey underwater.

**Cover:** When not incubating eggs or foraging, usually found at sea in daylight hours. May light on offshore rocks and roost in cliff crevices at night (Hoffmann 1927).

**Reproduction:** Breeds in large colonies on rocky, undisturbed islands (Harrison 1978). Nests in rock cavities or crevices along, or near, cliff ledges. Also has been recorded nesting in hollows under dense brush, in agave foliage, in vacant rabbit burrows, under old pelican nests, and in debris (Harrison 1978, Hunt et al. 1979). Nest is merely a hollow or scrape on the ground, with no lining (Harrison 1978).

**Water:** No known requirements for fresh water.

**Pattern:** For successful breeding, requires rocky, undisturbed islands with productive marine waters nearby.

#### SPECIES LIFE HISTORY

**Activity Patterns:** Yearlong, circadian activity. In breeding season, in daytime, forages at sea or stays at nest (Sowls et al. 1980). Nest site selection, incubation shift changes, and fledging occur at night (Hunt et al. 1979).

**Seasonal Movements/Migration:** Post-breeding dispersal apparently is northward. Found near mainland waters after breeding (Garrett and Dunn 1981). Most winter on pelagic

offshore waters from the Monterey area south; only occasionally seen as far north as British Columbia (Cogswell 1977).

Home Range: On Santa Barbara Island, during nesting period, adults foraged 2-14 km from the island (Drost and Lewis 1995).

Territory: On Santa Barbara Island, average distance between nests was 5 m (range = 0.15-40m, n=172), depending on the distribution and size of suitable caves, crevices and shrubs (Murray et al. 1983, as cited in Drost and Lewis 1995)

Reproduction: Lays eggs from early March through late June, with a peak from early April through early May (Hunt et al. 1979). Hatching and fledging occur from mid-April through August, with a peak from mid-May to late June (Hunt et al. 1979). Monogamous, colonial nester (Harrison 1978). Lays 2 eggs as clutch; occasionally a single egg (Harrison 1978). Incubation duties are shared by both parents; eggs are incubated for 41 days (Hunt et al. 1979). Highly precocial young fledge at about 2 days (Sowls et al. 1980). Flightless, downy young leave the nest at night and swim out to sea with parents (Hunt et al. 1979).

Niche: Peregrine falcons, western gulls, deer mice, and island foxes are all natural predators (Sowls et al. 1980). Peregrine falcons occur only as migrants on the Channel Islands; probably not a serious threat (Hunt et al. 1979). Santa Barbara and Anacapa are the only islands without foxes, possibly accounting for the large breeding colonies there (Sowls et al. 1980). Deer mice prey on eggs and possibly chicks, but evidently do not deter successful breeding (Hunt et al. 1979, Winnett et al. 1979). Feral rats on Santa Barbara Island apparently reduced the population from the turn of the century until 1975, when most feral rats were eliminated (Hunt et al. 1979). Vulnerable to oil pollution; an oil spill in the California Bight region in the breeding season would be disastrous because adults and flightless chicks would be concentrated near the colonies (Sowls et al. 1980).

## REFERENCES

- Cogswell, H. L. 1977. Water birds of California. Univ. California Press, Berkeley. 399pp.
- Drost, C. A. and D. B. Lewis. 1995. Xantus' Murrelet (*Synthliboramphus hypoleucus*). In The Birds of North America, No. 164 (A. Poole and F. Gill, eds.). The Academy of Natural Sciences, Philadelphia, PA and The American Ornithologists' Union, Washington, D. C.
- Garrett, K., and J. Dunn. 1981. Birds of southern California. Los Angeles Audubon Soc. 408pp.
- Harrison, C. 1978. A field guide to the nests, eggs and nestlings of north American birds. W. Collins Sons and Co., Cleveland, OH. 416pp.
- Hoffmann, R. 1927. Birds of the Pacific States. Riverside Press, Cambridge MA. 353pp.
- Hunt, G. L., Jr., and J. L. Butler. 1980. Reproductive ecology of the western gull and Xantus' murrelets with respect to food resources in the southern California Bight. CalCOFI Rep. 21:62-67.
- Hunt, G. L., Jr., R. K. Pitman, M. Naughton, K. A. Winnett, A. Newman, P. R. Kelly, and K. T. Briggs. 1979. Distribution, status, reproductive ecology and foraging habits of breeding seabirds. Pages 1-399 in summary of marine mammal and seabird surveys of the Southern California Bight area, 1975-1978. U. S. Dep. Inter., Bur. Land Manage., Los Angeles. Publ. PB-81-248-205.
- McCaskie, G., P. De Benedictis, R. Erickson, and J. Morlan. 1979. Birds of northern California, an annotated field list. 2nd ed. Golden Gate Audubon Soc., Berkeley. 84pp.
- McCaskie, G., P. De Benedictis, R. Erickson, and J. Morlan. 1988. Birds of northern California, an annotated field list. 2nd ed. Golden Gate Audubon Soc., Berkeley. Reprinted with suppl. 108pp.
- Sowls, A. L., A. R. DeGange, J. W. Nelson, and G. S. Lester. 1980. Catalog of California seabird colonies. U.S. Dep. Inter., Fish and Wildl. Serv., Wash. DC. Biol. Serv. Program FWS/OBS-80/37. 371pp.
- Winnett, K. A., K. G. Murray, and J. C. Wingfield. 1979. Southern race of Xantus' murrelet

breeding on Santa Barbara Island, CA. West. Birds 10:81-82.